

TWO-LOBE ROTARY MACHINE**ABSTRACT**

A rotary machine including a housing with spaced apart end walls defining a chamber. A two-lobe lenticular rotor assembly is disposed in the chamber
5 for eccentric rotation therein. A hole passes through a central portion of the rotor assembly. Slots are cut in one end of the rotor assembly about the center of the rotor assembly. A rotor guide assembly includes generally cylindrical guideposts which extend parallel toward the slots and engage in eccentric rotation of the slots. A shaft extends through the center of the hole. In one embodiment an even number of six or
10 more spaced slots and half that number of guideposts spaced around the shaft are used which allows for a larger sized hole and shaft. In another embodiment, four slots which are shifted toward the apices of the rotor, and two guideposts are used, which also allows for a larger sized hole and shaft.